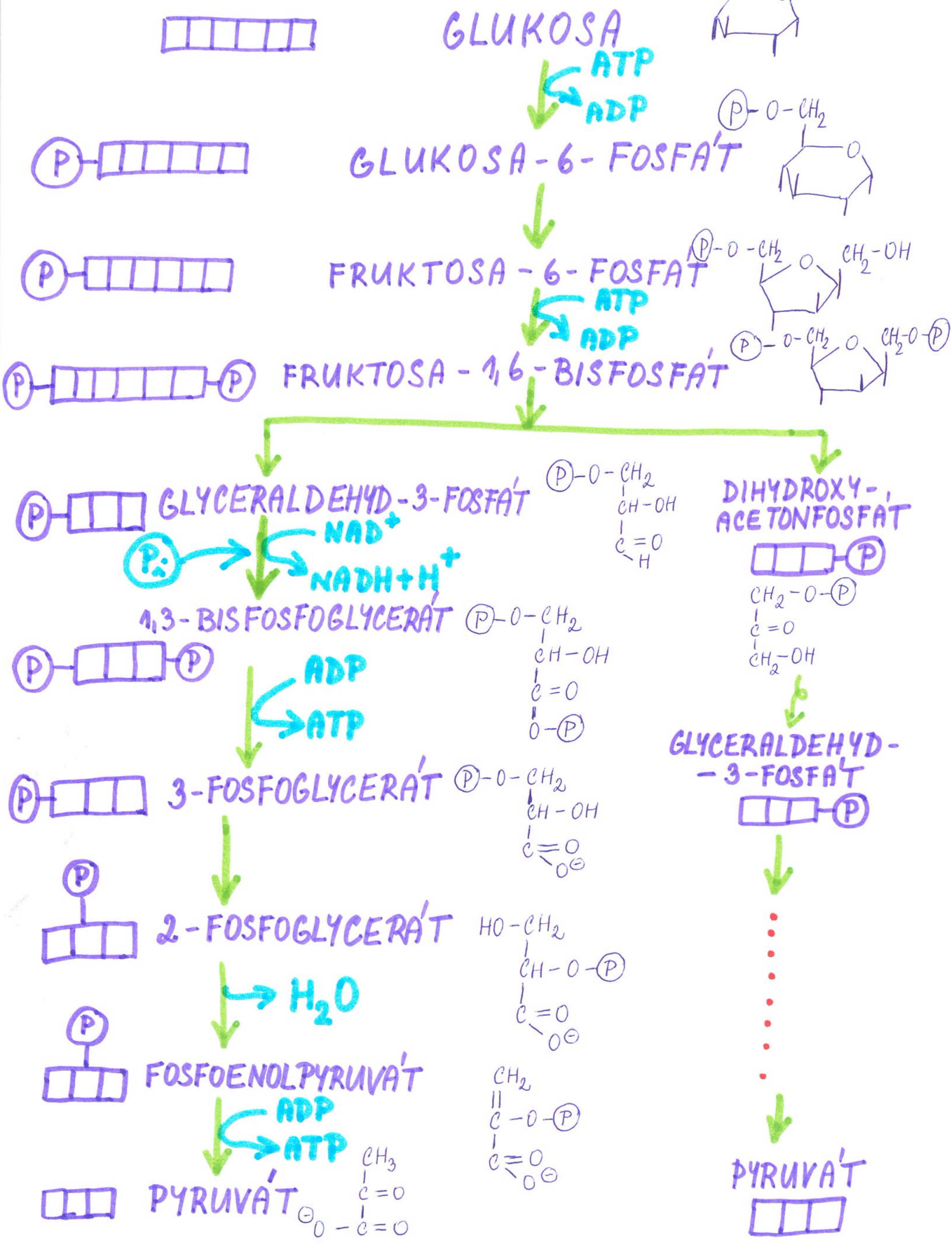
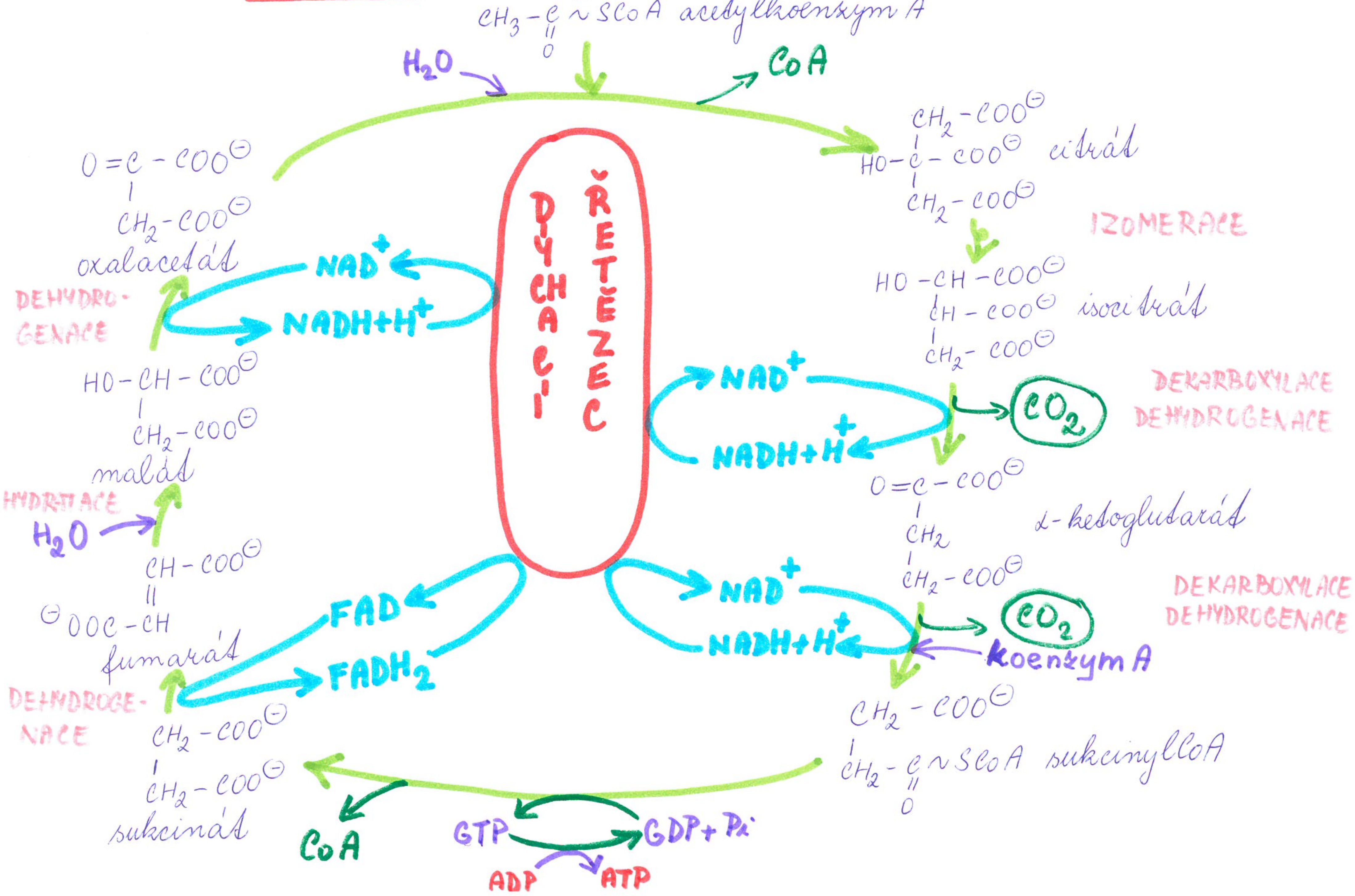
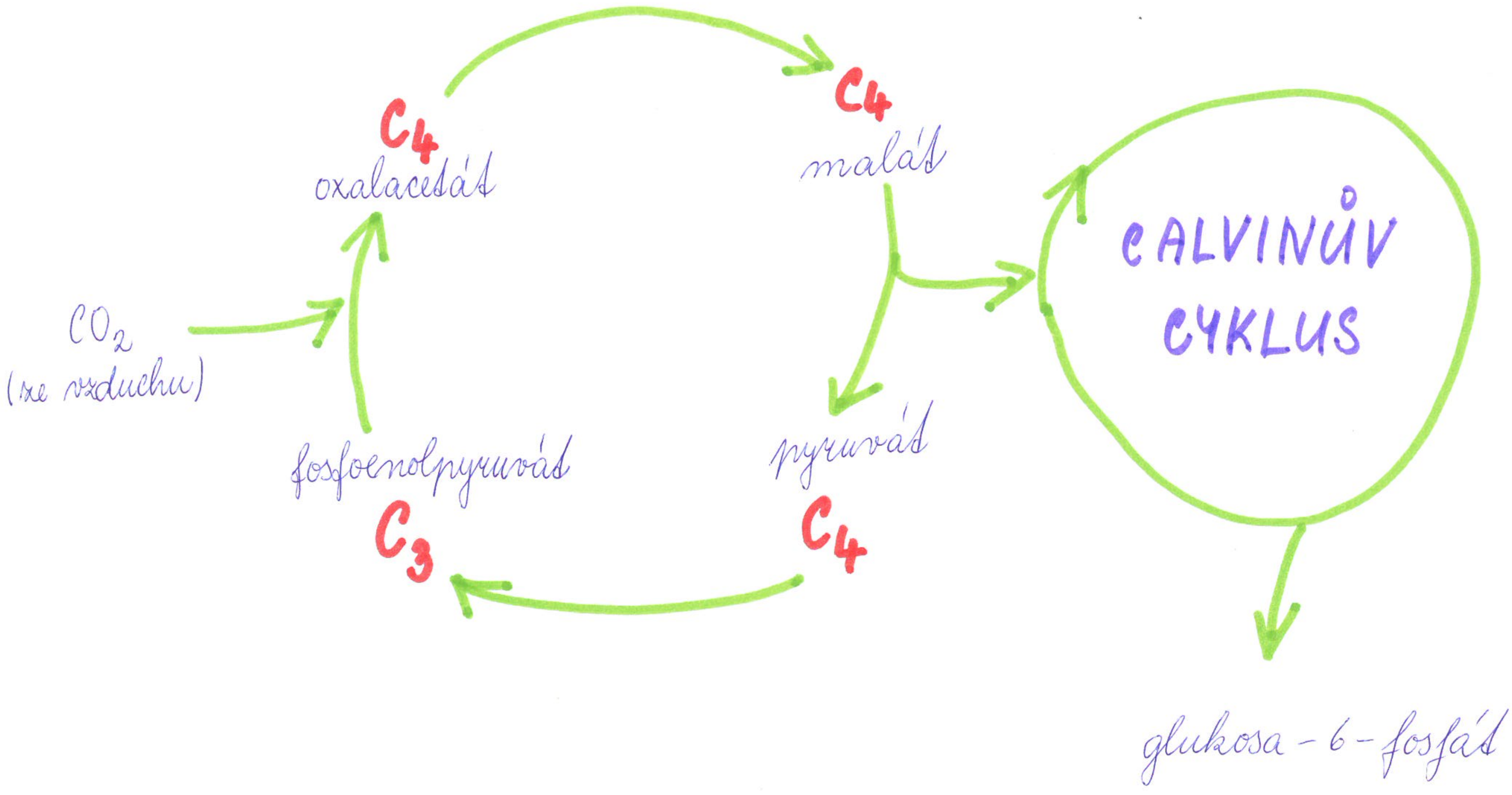
GLYKOLÝZA


GLUKOSA
ATP
ADP
GLUKOSA-6-FOSFÁT
FRUKTOSA-6-FOSFÁT
ATP
ADP
FRUKTOSA-1,6-BISFOSFÁT
GLYCERALDEHYD-3-FOSFÁT
DIHYDROXYACETONFOSFÁT
NAD+
Pi
NADH+H+
1,3-BISFOSFOGLYCERÁT
ADP
ATP
3-FOSFOGLYCERÁT
2-FOSFOGLYCERÁT
H2O
FOSFOENOLPYRUVÁT
ADP
ATP
PYRUVÁT
GLYCERALDEHYD-3-FOSFÁT
PYRUVÁT

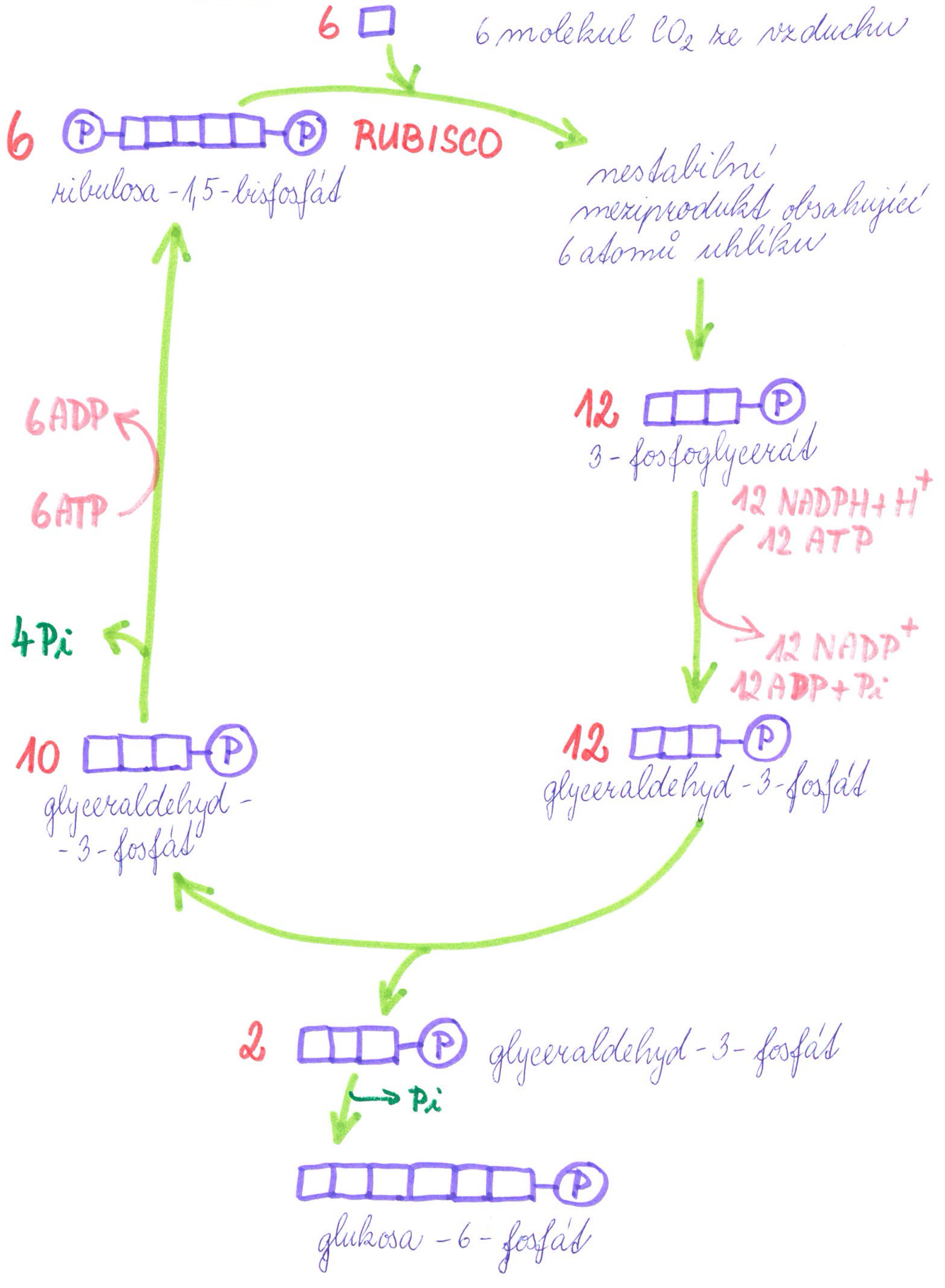
KREBSŮV CYKLUS



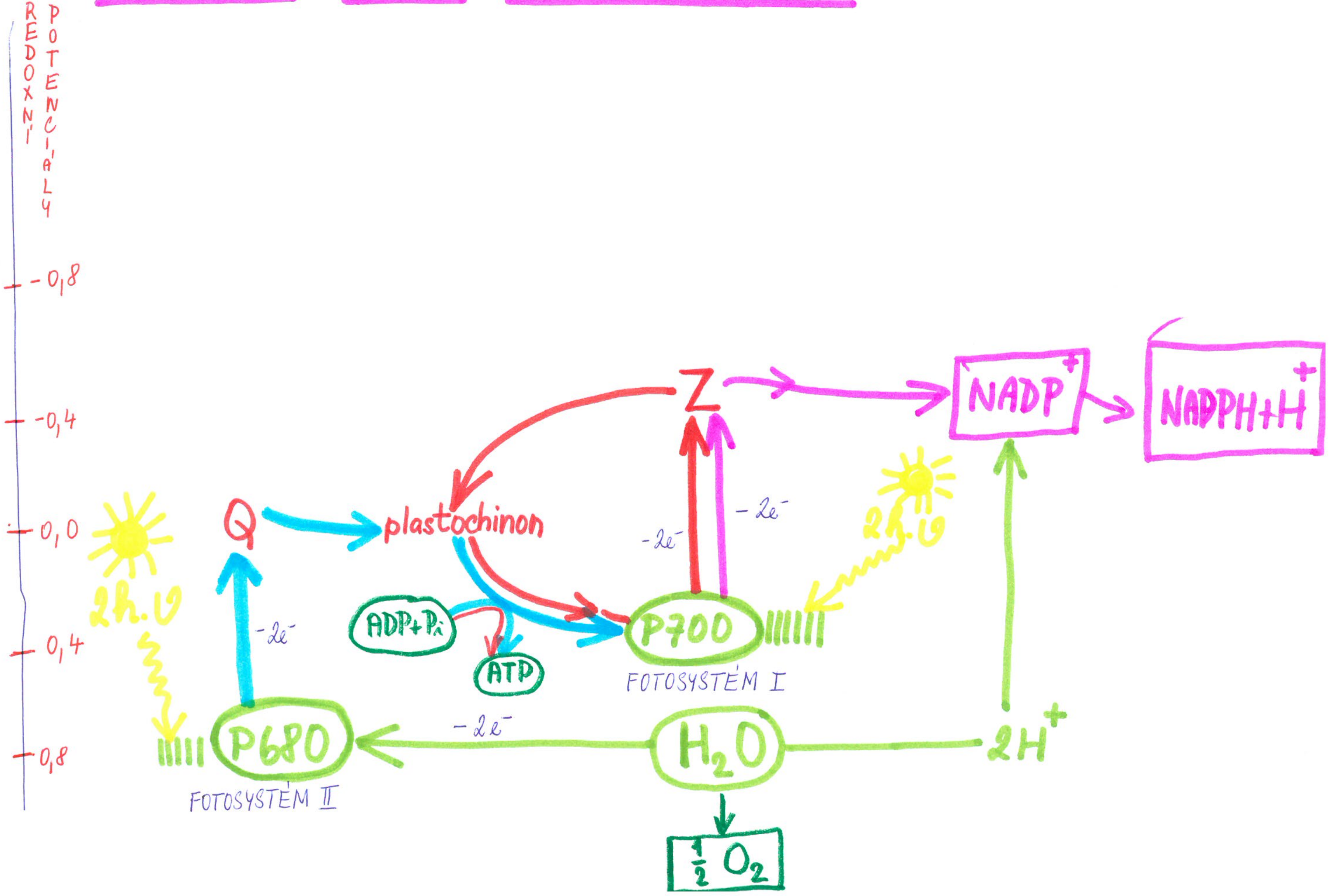
FIXACE CO_2 u C4 ROSTLIN



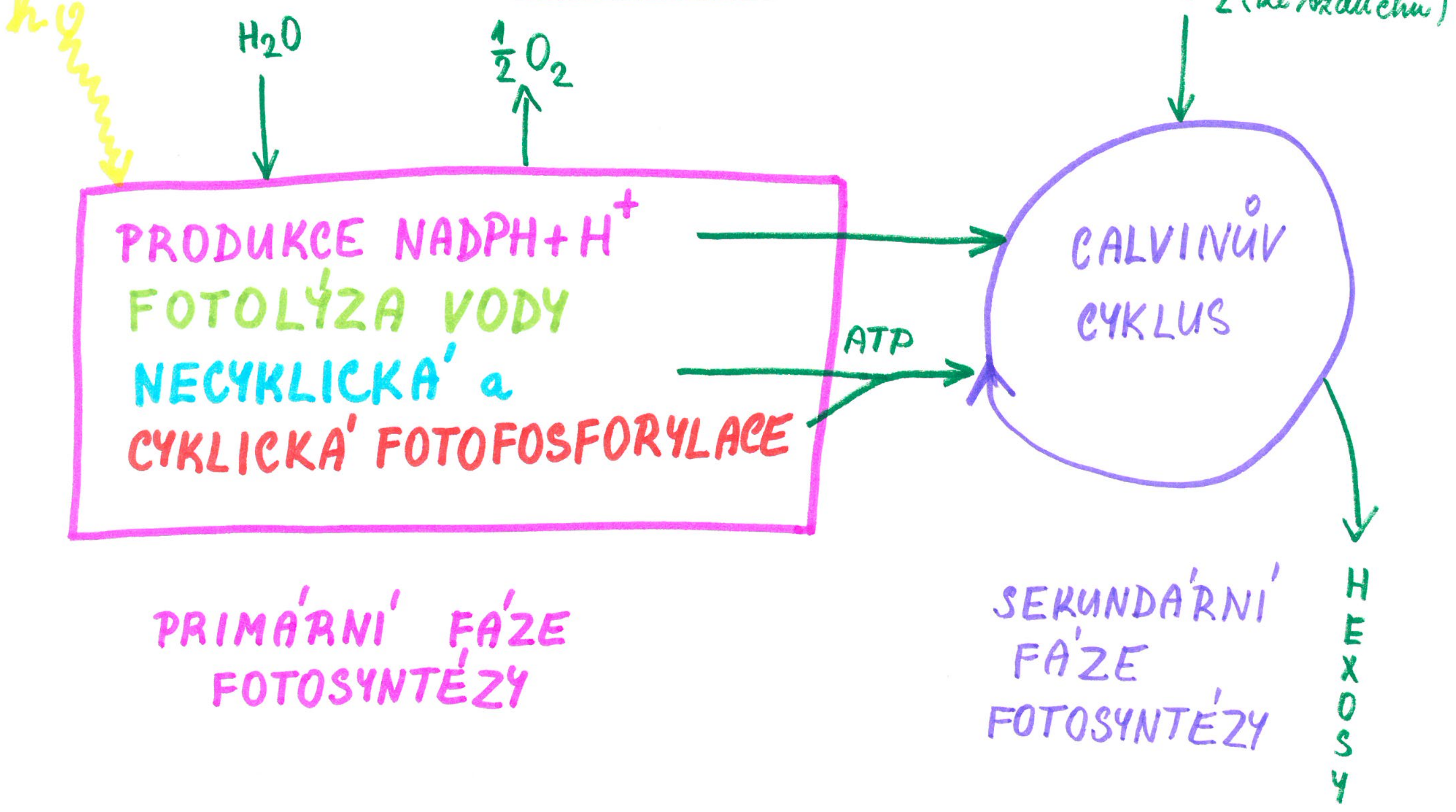
CALVINŮV CYKLUS



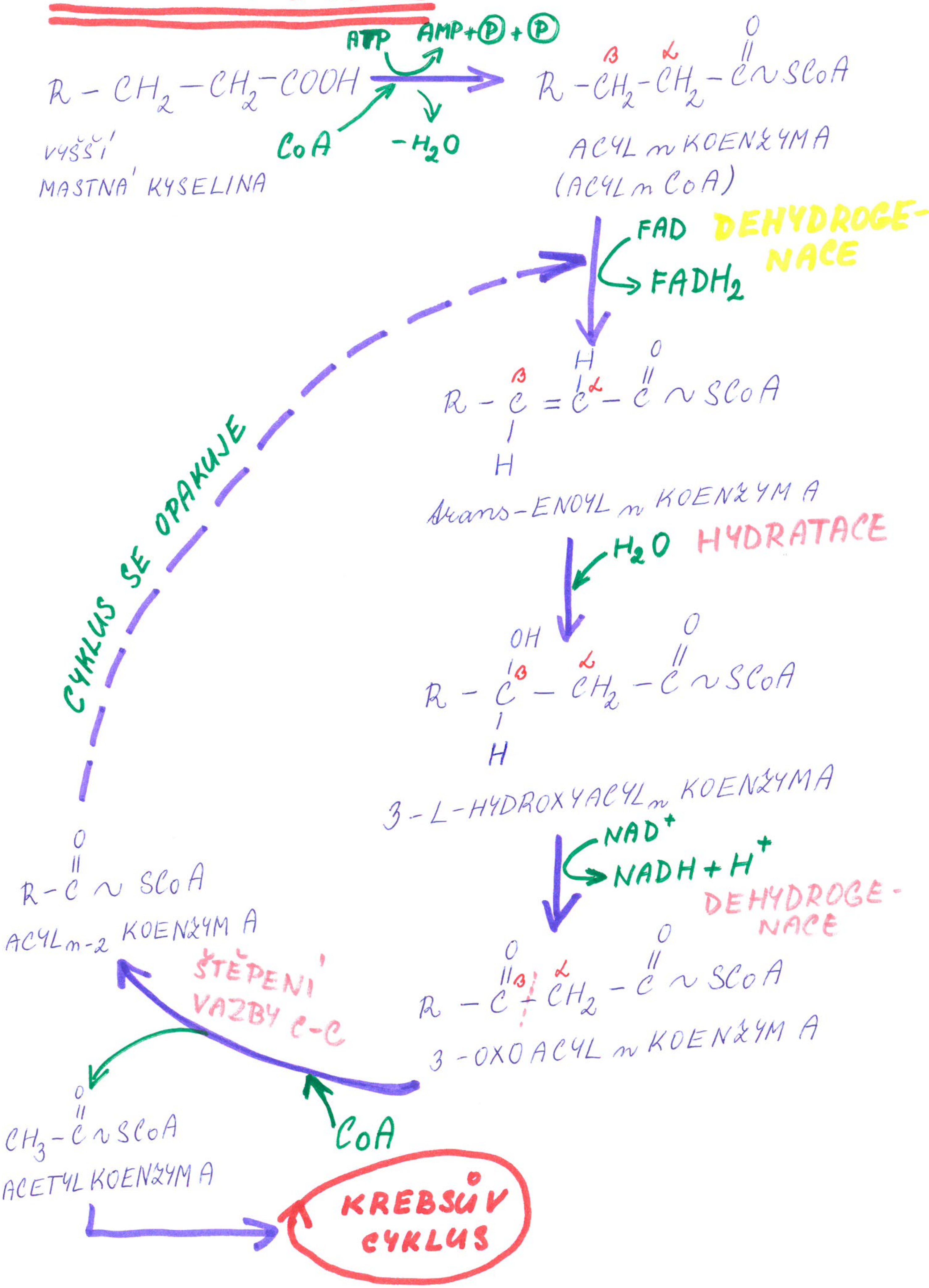
PRIMÁRNÍ FÁZE FOTOSYNTÉZY



PROPOJENÍ PRIMÁRNÍ A SEKUNDÁRNÍ FÁZE FOTOSYNTÉZY

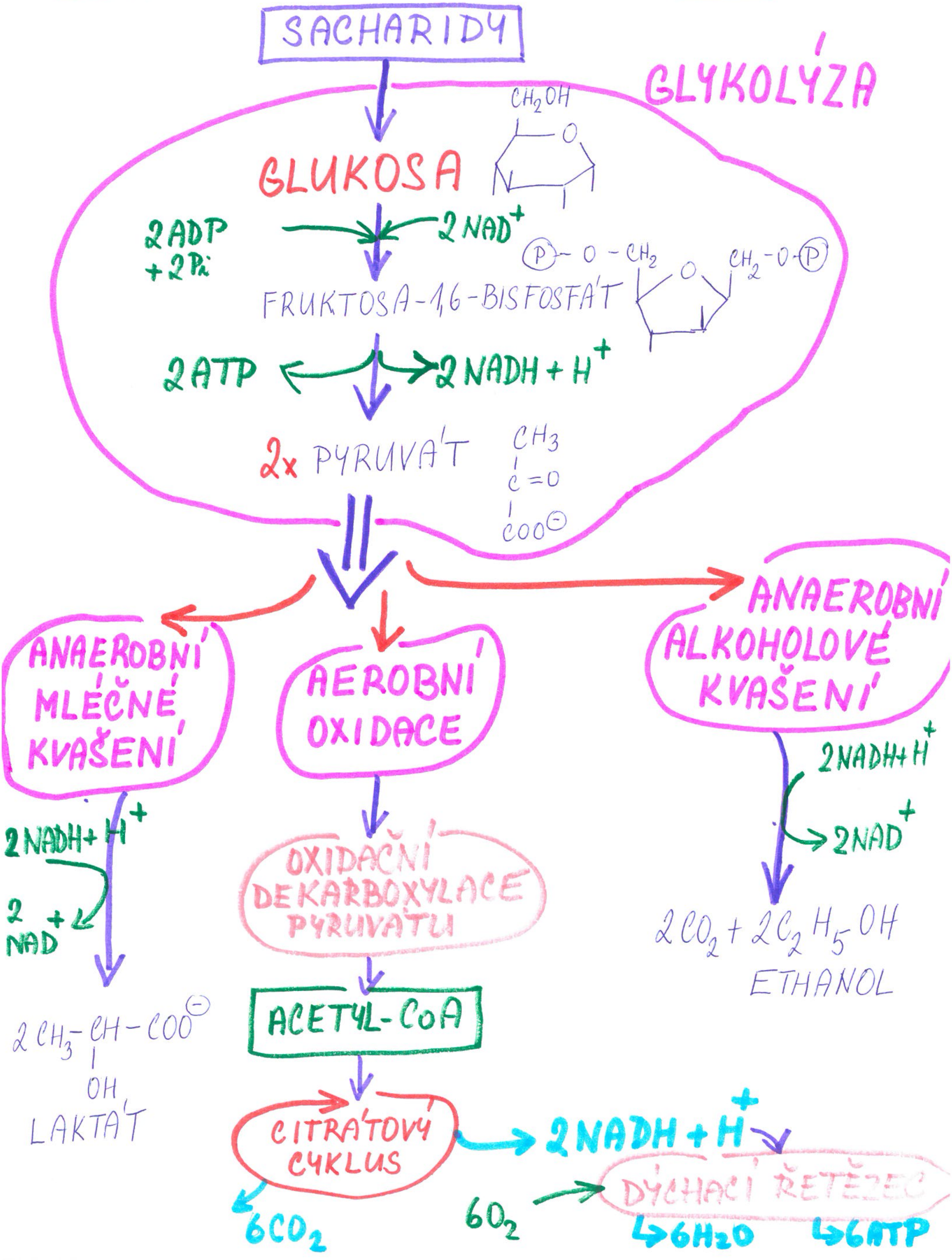


β - OXIDACE

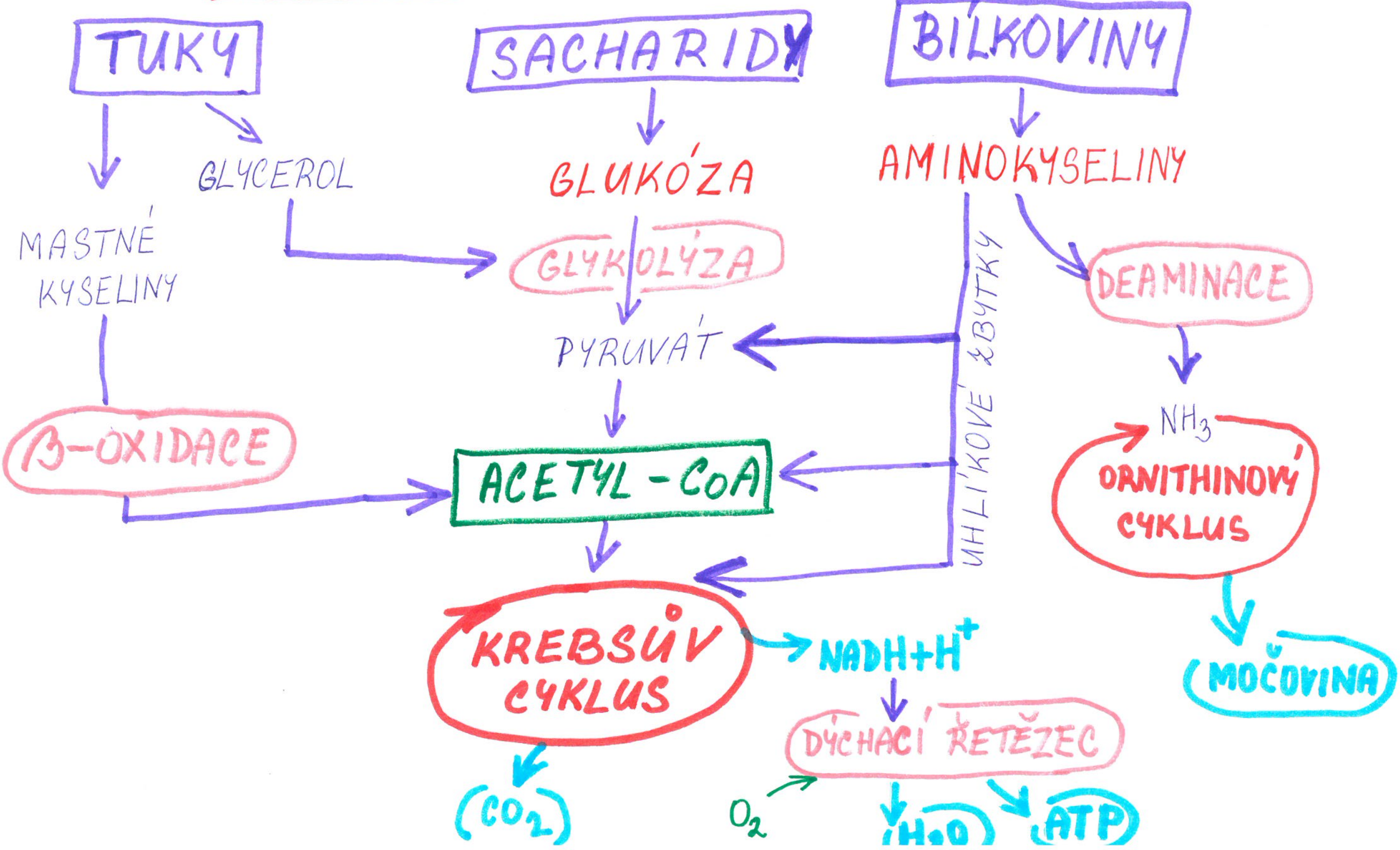


R - CH₂ - CH₂ - COOH
VYŠŠÍ MASTNÁ KYSELINA
ATP
AMP + Ⓟ + Ⓟ
CoA
- H₂O
R - CH₂ - CH₂ - C(=O) ~ SCoA
β
α
ACYL ~ KOENZYM A
(ACYL ~ CoA)
FAD
FADH₂
DEHYDROGENACE
R - C(H) = C(H) - C(=O) ~ SCoA
trans-ENOYL ~ KOENZYM A
H₂O
HYDRATACE
R - C(OH)(H) - CH₂ - C(=O) ~ SCoA
3-L-HYDROXYACYL ~ KOENZYM A
NAD⁺
NADH + H⁺
DEHYDROGENACE
R - C(=O) - CH₂ - C(=O) ~ SCoA
3-OXOACYL ~ KOENZYM A
ŠTĚPENÍ VAZBY C-C
CoA
R - C(=O) ~ SCoA
ACYLₙ₋₂ KOENZYM A
CH₃ - C(=O) ~ SCoA
ACETYL KOENZYM A
KREBSŮV CYKLUS
CYKLUS SE OPAKUJE

METABOLISMUS SACHARIDŮ



PROPOJENÍ METABOLISMU LIPIDŮ, SACHARIDŮ A BÍLKOVIN



KATABOLISMUS LIPIDŮ